MINNESOTA INTERNATIONAL HEALTH VOLUNTEERS

DETAILED IMPLEMENTATION PLAN

for the

CHILD SURVIVAL PROJECT
DAGORETTI, KENYA

Cooperative Agreement No. FAO-0500-A-00-4042-00
September 1, 1994 - August 31, 1997

Submitted to:

Child Survival and Health
Office of Private and Voluntary Cooperation
Bureau for Food and Humanitarian Assistance
United States Agency for International Development

Prepared by:

Leonida Atieno, Assistant Project Director, Kenya
Stella Chao, Volunteer Health Educator, Kenya
Eric Jamison, MD, Volunteer Medical Director, Kenya
Lois Miano, RN, Deputy Project Director, Kenya
Garth Osborn, MPH, Program Officer, US
Michael Smyser, MPH, Kenya Project Director, Kenya

Minnesota International Health Volunteers
122 West Franklin Avenue, Suite 110
Minneapolis, MN 55404 USA
Telephone: 612/871-3759
FAX: 612/871-8775

March 1995

DIP TABLE OF CONTENTS

ACRONYMS

AIDS	Acquired Immunodeficiency Syndrome
AIDSCAP	AIDS Control and Prevention (Project)
AMREF	African Medical Research and Education Foundation
ALRI	Acute Lower Respiratory Infection
AVSC	Adult Voluntary Surgical Contraception
CBD	Community-Based Distributors
CDD	Control of Diarrhea1 Diseases
CHW	Community Health Worker
CHWR	Community Health Worker Representatives
CBHC	Community-Based Health Care
DIP	Detailed Implementation Plan
EPI	Expanded Program of Immunization
FP	Family Planning
FPAK	Family Planning Association of Kenya
FPPS	Family Planning Private Sector
HC	Health Center
HIS	Health Information System
IGA	Income Generating Activity
JHU	Johns Hopkins University
JSI	John Snow, Inc.
KAS	Kenya AIDS Society
KEMRI	Kenya Medical Research Institute
MIHV	Minnesota International Health Volunteers
MOH	Ministry of Health
NCC	Nairobi City Council
NGO	Non-governmental Organization
ORT	Oral Rehydration Therapy

PATH	Program for Appropriate Technology in Health
PSI	Population Services International
PWA	Person with AIDS
STD	Sexually Transmitted Disease
TAPWAK	The Association of People with AIDS in Kenya
TOF	Trainers of Facilitators
UNICEF	United Nations International Children's Educational Fund
USAID	United States Agency International Development
WHO	World Health Organization

Section A. DIP FIELD PROJECT SUMMARY TABLE

See Attachment A for Table A: Field Project Summary

Section B. LOCATION AND FORMAL AGREEMENTS

B.1 Location description

The MIHV Dagoretti Child Survival Project is being implemented in the Dagoretti Division of Nairobi. Dagoretti is a peri-urban slum area in the western-most division of Nairobi Province. Within the project area are three subdivisions: Waithaka, Mutuini, and Ruthimitu-Uthiru.

The current estimated total population in the service area is 42,000, although other estimates have set the figure as high as 62,000. The higher figure of 62,000 was based on the 1979 census data with a 7% annual increase (1989 Kenya Demographic and Health Survey which was developed by the Ministry of Home Affairs and National Heritage). Based on the 1989 census data, however, which was released in 1994, the annual project growth rate appears to be closer to 3.6%.

The target population includes women 15 to 49 years, children under the age of two, and high risk children under the age of five. It is estimated that the total number of children under the age of two is at least 2,300. An estimated 3,500 births occurred during the period 1991 - 1994.

According to the Project's baseline data of women with children under two years of age, the mean age of mothers was 24 years. Literacy rates of these mothers was high, 91.5%. But income generating activities were available to only 18.9%. Unemployment in Kenya is currently high and is increasing, negatively affecting the accessibility to health care for poor people and therefore the health status of the population.

B.2 Location iustification

The Project site selection was made by Dagoretti community leaders, in collaboration with the Nairobi City Council (NCC)'s Departments of Public Health and City Planning, the University of Nairobi Medical School's Department of Pediatrics, and other NGOs . In 1987, MIHV staff approached the District Officer, Emma Ndario, with a proposal to develop a primary health care program in Dagoretti. The community leaders explained their plan for health care services in Dagoretti to MIHV in a series of

meetings. Their principle requirement for establishing the Project was that it include a clinic. The site of the clinic had already been chosen by the community.

The Nairobi City Council (NCC) operates a health center in Waithaka, which is approximately four kilometers from the Chandaria-MIHV Health Center (HC) and located within the project area. It is staffed by NCC nurses, but currently has no clinical officer. The effectiveness of the NCC clinics has been hindered by lack of drugs and basic medical supplies. The Chandaria-MIHV Health Center (HC) works in close cooperation with the Waithaka clinic. MIHV has had discussions with NCC about providing administrative support to improve the quality of their services.

B.3 Formal agreements

A formal agreement between the Nairobi City Commission (NCC), Chandaria Foundation, and MIHV was signed at the inception of the Project in 1988. Provisions in this agreement include leasing of the land for the HC for a period of 99 years and authorization to operate a fee-for-service, non-profit clinic. In addition, a formal agreement with the Kenya Ministry of Health (MOH) assures the Project technical support and guidance, monitoring and evaluation, supply of vaccines, contraceptives, ORS and health education materials. It is through this agreement that the MOH plays a major supportive role by seconding 16 clinical staff to the Project.

MIHV has collaborative agreements with the University of Nairobi Departments of Nursing Science, Obstetrics and Gynecology and Community Health Management. These enable the Project to integrate trainings in community services with the activities of the HC. In addition, the Department of Pediatrics participates in the HC's Board of Management. This cooperation is an important component that directly contributes to project sustainability.

Section C. PROJECT DESIGN

C.l Baseline survey results

A copy of the 1994 Baseline Survey is included as Attachment B. This survey was conducted in late July by a team that included MIHV field staff, a MIHV home office representative and two external evaluators.

c.2 Goal and obiectives

A copy of Table B, summarizing the project's overall goal and measurable objectives for each intervention, is included as Attachment C.

c.3 Proiect desisn

The MIHV Dagoretti Child Survival Project integrates a health center (HC) and a community-based health care program (CBHC). The HC was constructed with local funding in 1991 and has since provided basic primary and curative care to the Dagoretti community. It is staffed by 30+ trained Kenyan health care professionals (clinical officer, nurses, lab and pharmacy technicians, and nutritionist) and support staff (administrators, CBHC trainers, clerks, facility maintenance staff and guards). The CBHC was initiated in 1988 when MIHV began it's project in Dagoretti. The primary implementers of the CBHC are 261 trained volunteer community health workers (CHWs).

Recently, efforts have been directed towards integrating the services of the HC with those of the CBHC as a way to strengthen both. MIHV utilizes both the HC and CBHC as mechanisms for achieving the objectives of this child survival project. The HC nurses are involved in training and supporting CHWs, and offering health education to the community. The CHWs refer cases to the HC.

This integration of services has enhanced both the HC and the CBHC. The HC has a strong connection to the community through the CHWs. The CHWs' credibility has been enhanced as a result of the existence of an affordable, efficient health care center in the project area where they can refer clients. It is also felt that this integration of services will help to insure sustainability of the Project beyond the continuation of direct USAID involvement.

This design was adopted to reflect community interest and primary health care needs in Dagoretti. Prior to the start of this project the community had already developed plans for a primary health care program that would include the construction of a health center.

Women and children enter the program through both the HC and the trained CHWs. Mothers and children receive health education and counseling, immunizations, and other primary health care services at the HC. The CHWs, TBAs and CBDs are also entry points for the distribution of project services. In addition, the project uses a variety of approaches to advertise it's services and communicate health education messages to the community, including barazas, harambees, videos presented at the HC, and advertising. The principle targets for health education messages are mothers of children under the age of five.

Following is **a** list of the specific interventions of this child survival project and the populations targeted.

- HIV/AIDS Prevention/STDs: Primary targets are women of childbearing age and their partners. Secondary targets are youth.
- a Family Planning/Maternal Care: Targeting women of childbearing age.
- ALRI/EPI: Primary targets are infants. Secondary targets are children ages one to five.
- ORT/Nutrition/Environmental Health: Targeting mothers of children under the age of five.

c.4 Proiect evaluation

The project will conduct a mid-term evaluation in 1996 to assess the development of its programs and suggest modifications to enhance effectiveness. A final evaluation will be conducted in 1997. In addition to these formal evaluations, the project will conduct mini-surveys of CHWs and TBAs and review their monthly reports. The project will continue to review HC data regarding preventive and curative care of project area patients.

c.5 Trainins/supervision plan

The Deputy Project Director oversees the CBHC program. Two Assistant Project Officers coordinate and conduct trainings of CHWs and TBAs. These project staff will be trained and certified as Trainer of Facilitators (TOF) by AMREF. Upon completion, they will be certified to train CHWs and TBAs. In addition, the

Assistant Project Officers will facilitate trainings of the HC nurses in working with TBAs and CHWs.

The project will have 300 active CHWs by August 1997. To date, 261 CHWs have been trained. An additional 150 CHWs will be trained by August 1997, bringing the total number of trained CHWs up to 411 for the period 1988-1997. This has taken attrition into account. MIHV's experience is approximately 20% annual attrition in volunteer involvement.

Based on census estimates, there were approximately 11,200 households in the project area by the end of 1994, resulting in a 1:37 ratio of active CHWs to households. This is projected to be 1:44 by 1997. The ratio of CHWs to children is projected to be one to eight by June 1995. Each child under the age of two will receive at least one home visit per year from a project CHW.

The CHWs spend a minimum of two hours per week doing project-related volunteer activities. By August 1997, this will result in over 30,000 hours of volunteer time per year being directed towards primary health care needs in Dagoretti community.

Each CHW must attend at least three refresher courses during a three year period for their ID cards to be renewed. A schedule is being developed that will include one refresher training per location for each month. Those who participate in the refresher courses are issued current ID cards, new CHW T-shirts, and new certificates. Ninety (30 per location) refresher courses will be provided by the Project by August 1997. The trainings will be led by the Assistant Project Officers.

Sixty Community Health Worker Representatives (CHWRs) will be selected from the 300 CHWs. By the end of 1995, all CHWRs will be provided with refresher courses and trained in CHW supervision and HIS reporting. This will result in a CHW : CHWR ratio of four to one. CHWRs will interact at the village level with CHWs and be involved in recruiting and training future CHWs.

Thirteen Traditional Birth Attendants (TBAs) have been trained. With the recruitment of an ECN/midwife/TOT, the project will train an additional 47 TBAs. Refresher and new topics will be conducted at monthly meetings. Fifteen TBAs will be trained in 1995 and the remaining 31 in 1996. MOH nursing staff will also be utilized to conduct these trainings so that they may gain the training skills necessary to implement these trainings on their own.

The Deputy Director and Assistant Project Officers will train the Area Health Committees and the HC's Board of Management in

project governance and leadership. Official registration of the Area Health Committees as a self-help group is expected by June 1995.

C.6. Response to proposal review comments

The project has addressed the concerns raised in the proposal's technical review throughout the DIP. In addition, specific responses are included as Attachment D.

C.7 Detailed plans by intervention

The Project goals are 1) to reduce morbidity and mortality of children under-five and in women of child-bearing age, and 2) to provide the project with the resources and training necessary to sustain itself beyond August 1997 when USAID financial support ceases.

Section C.7a - DIP for Immunization (EPI)

7a.l Coverage Estimates

From the July 1994 Baseline Study, the project has learned that for children age 12-23 months, 96% had received DPT1; 83% had received OPV3 (four doses including birth dose); and, 86% had received measles vaccination. The dropout rate for DPT immunizations was 3%. Full immunizations (BCG, DPT3, OPV3, and Measles vaccinations) were received by 77% of project children aged 12-23 months.

The MOH immunization schedule for Kenya requires at least five visits:

Birth	BCG, OPV
6 weeks	OPV1, DPTl
10 weeks	OPV2, DPT2
14 weeks	OPV3, DPT3
9 months	Measles

The percent of births fully protected by two maternal doses of tetanus toxoid vaccine is estimated to be between 34% (99/294) and 59% (99/168), based on examination of mother's antenatal care cards.

7a.2 Knowledse & Practice

Mothers' awareness of the importance of having their children immunized is high as evidenced by the high immunization rates in the project area. However, from the base-line survey only 40% (118/296) of mothers surveyed knew that TT vaccination provided protection for both the mother and child.

7a.3 Immunization Obiectives

a. Maintain at 95% the number of children 12 to 23 months who received DPT1.
b. Maintain at 95% the number of children 12 to 23 months who received DPT3.
c. Increase from 86% to 90% the number of children who received measles vaccine.
d. Maintain the dropout rate of children 12 to 23 months between DPTl and DPT3 at 5%.
e. Maintain at 99% the number of children 12 to 23 months who received BCG.
f. Increase from 83% to 90% the number of children who are receiving OPV3.
g. Increase from 73% to 80% the number of children fully immunized by 11 months of age.
h. Increase from 34% to 50% the number of mothers in the project area have received at least two doses of TT vaccination.
i. Increase from 40% to 75% the number of mothers who know that tetanus toxoid protects both the child and the mother against tetanus.

7a.4 Approach

The project provides immunizations free of charge on a year round basis at the HC. These vaccines are supplied through the MOH distribution center located ten kilometers from the HC. They are maintained at the HC in an electric vaccine refrigerator that has solar power and gas backups in case of electrical failure. The immunizations are administered by the nine HC nurses who have been seconded from MOH. Each has been specially trained in vaccine administration.

The CHWs are the primary contact between the project and "high risk" groups. They educate current and expectant mothers on the importance of timely immunizations and refer them into the HC. Other means used to educate the "high risk" groups include barazas and the folk media festivals. Collaboration with UNICEF's Day of the Child program will continue to replace the previous

outreach mobile clinics.

The project adheres to a "no miss" policy for vaccinations when children come for care. In July 1995, the project will conduct an evaluation of the effectiveness of this policy to determine where improvements can be made and where in-service training of staff are needed. This will include a short KAP survey on immunizations.

7a.5 Population

The estimated targeted population for immunizations is 23,022.

Live births, year 2 & 3	2,782
Infants, O-11 months	1,315
Children, 12-23 months	1,022
Children, 24-59 months	3,129
Females, 15-49 years	10,537
Total project area	18,785
HC attenders from outside main project area	4,237
Total Beneficiaries	23,022

7a.6 Individual Documentation

The project uses "Road to Health" cards printed by the MOH. A sample is included as Attachment E. CHWs are taught to read immunization/growth monitoring cards during home visits. For lost cards, data can be re-entered using records maintained in the HC registry. When records aren't available, project staff reconstruct the data based on discussions with the parents.

Immunization cards are required of children when they enroll in primary schools. Therefore, mothers are motivated to maintain the cards and to insure that their children get fully immunized. In addition, CHWs, UNICEF mobile clinics, and village health campaigns encourage the mothers to have their children immunized. Cards are issued in protective plastic envelopes to promote proper care and retention. Cards are currently obtained from the MOH and UNICEF. Only minimal costs are incurred through the purchase of plastic covers for the cards and their delivery to the HC.

7a.7 Drop-outs - Children

The major causes of dropouts and missed opportunities include difficulty for mothers to get to the HC and lack of awareness of the value of immunizations. The project has utilized CHWs, TBAs, and community-targeted health education events as mechanisms for insuring that mothers are getting into the HC with their childrer for immunizations. As demonstrated in the 1994 Baseline study, drop out rates are low and immunization coverage rates are high.

7a.8 Drop-outs - Women

The major causes of dropouts and missed opportunities include difficulty for mothers to get to the HC and lack of awareness of the value of immunizations. Only 40% of mothers surveyed in July 1994 knew that TT vaccination provides protection for both the mother and child. The project will utilize CHWs, TBAs and community-targeted health education events to insure that expectant mothers are getting into the HC for immunizations.

7a.9 Cold Chain Support

There are no apparent weak links in the cold chain. Vaccines are supplied through the MOH distribution center located ten kilometers from the HC and maintained at the HC in a electric vaccine refrigerator that has solar power and gas backups in case of electrical failure. Vaccine temperature is monitored twice per day by MOH nurses who are trained in standard EPI handling and administration protocols. Vaccines are kept between zero and eight degrees Celsius. Any variance form this results in the destruction of vaccines and procurement of new stocks.

7a.10 Surveillance

EPI disease surveillance activities are not part of this Project. Although vaccine preventable diseases are monitored through routine HC morbidity statistics. Any occurrence or increase in the incidence of these diseases can be investigated through existing enrolled community nurses.

Section C.7b - DIP Control of Diarrhea1 Disease (CDD)

7b.l Baseline

The 1994 Baseline Survey showed that 25.7% of children under five

had had episodes of diarrhea in the preceding two weeks. Estimates indicate 584 cases of diarrhea per year occurred in the project area. Per child and length of episode data are not available. The MOH has stated that dehydration from diarrhea is a major cause of child morbidity and mortality in Kenya. From HC cases and CHW reports, the morbidity is high in our project area; mortality is not.

7b.2 Knowledse & Practice

The 1994 Baseline Survey reports that 77.4% of mothers who breastfeed continue or increase feeding their children during diarrhea1 episodes. Continuing fluids and foods has been emphasized in community education through CHWs. 67.1% of mothers surveyed continued giving fluids and 50.7% continued giving foods. Only 35.5% of mothers used ORS packets which are purchased locally. CHWs are trained to advise against the use of antibiotics and antidiarrheal medications, referring the more serious cases to the HC for treatment.

7b.3 MOH Protocol & Practices

MOH policy is to 1) continue giving fluids, 2) continue feeding, 3) observe for signs of dehydration, and 4) test stools and treat accordingly.

Diarrhea1 disease is a growing problem in the community resulting from increased population density, water access problems, and economic hardship. The project will focus on community targeted prevention and control via CHW trainings and refresher courses. Dysentery is not a major problem in our project area.

7b.4 Diarrhea1 Disease Control Obiectives

a. Increase from 77% to 85% the number of children under two years who continue to breastfeed the same amount or more during a diarrhea1 episode.
b. Increase from 67% to 80% the number of children under two years who receive the same or more fluids other than breastmilk during a diarrhea1 episode.
c. Increase from 51% to 60% the number of children under two years who receive the same amount of food during a diarrhea1 episode.
d. Increase from 35% to 45% the number of children under two years who receive ORT.

7b.5 Approach

CHW trainings and refresher courses stress the importance of prevention, such as exclusive breastfeeding for infants up to four months of age, personal and environmental hygiene, and proper preparation of foods. The CHW Training Manual and the CHW training sessions advise mothers in early initiation of fluids, to give home-available fluids or ORS, to give increased nutritious feedings in frequent small amounts, and to watch for signs and symptoms of dehydration.

The CHWs are the primary contact between the project and "high risk" groups. They educate mothers on the importance of prevention and treatment of diarrhea1 diseases. Other means used to educate the "high risk" groups include barazas and the folk media festivals. The CHWs are trained to refer more serious diarrhea1 **cases** to the HC.

The project works with other local organizations to address environmental health problems that impact on diarrhea1 disease in the project area. These have included working with local slaughterhouse owners to prevent slaughterhouse effluent from polluting local water sources. The project has also worked with UNICEF and the Nairobi City Council to designate new public water distribution points within the project area.

7b.6 Population

Children under the age of two are the primary target for the CDD intervention. The current population estimate is 2,337. The ratio of CHWs to children under two will be one to eight (300 : 2,337) by June 1995. Each mother with a child under the age of two will receive at least one home visit be a CHW each year. The project estimates that this will help to reach the targeted level of ORT knowledge and use.

7b.7 ORS

ORS packets are no longer available from MOH. Occasionally, the project receives donations from UNICEF. However, these supplies are not reliable. ORS packets can only be consistently acquired through local pharmacies at relatively high prices (@ US$0.90). ORS packets are distributed in two different sizes that are almost identical. The instructions are in English. Proper use by those mothers who are not literate or conversant in English becomes a problem.

The HC pharmacy distributes ORS packets free of charge when

prescribed by HC health staff. Directions are given to the mother by the HC staff. Via the CHWs, the project advises on use of home-available fluids and the preparation of SSS.

7b.8 Home Available Fluids

Local home-available fluids include uji (a maize meal/sorghum meal porridge), chai (tea made in half-milk and half-water), vegetable and meat soups, whole milk, and fruit juices.

Determination of exact chemical composition of these fluids is not within the project objectives.

7b.9 Health Education

Mothers will be taught by HC staff during clinic visits and by CHWs during home visits on the proper preparation and administration of ORT. The CHWs are trained to advise mothers to initiate fluids early, to give home-available fluids or ORS, to give feedings in more frequent smaller amounts, and to watch for signs and symptoms of dehydration. The importance of ORT in the control of diarrhea1 disease will be highlighted in the barazas, folk media festivals and other public events. Much of this effort will be coordinated by the full-time nutritionist who has been seconded from MOH.

The impact of mothers' knowledge of dietary management of diarrhea will be assessed in the midterm and final evaluation survey. The project uses IEC materials developed and provided by AMREF and the MOH in CHW trainings and home visits that demonstrate the value of ORT.

7b.10 Other Strategies

The project plans to increase community and HC-based education on breastfeeding, environmental hygiene, personal hygiene, proper preparation of foods and immunizations in order to address the control of diarrhea1 disease in the Project area.

Section C.7c - DIP for Nutritional Improvement

Nutritional Improvement for Infants and Children

7c.l Baseline

The 1993 Kenya Demographic and Health Survey states that in Nairobi Province 26.6% of the 166 children surveyed were below

two standard deviations of the median WHO international reference by height-for-age. Within the project area, the 1994 Baseline Survey indicated that 4.7% of children surveyed were below normal growth rates. The only anthropometric measurement taken is age-by-weight.

7c.2 Current Practices

1994 Baseline survey data indicates that 87.7% of mothers breastfeed their children. Of these mothers, 87.7% initiated breastfeeding within eight hours after birth. However, exclusive breastfeeding for infants four months and younger was 18%. Introduction of solid and semi-solid foods was initiated between five and nine months (88%) and persistence of some breastfeeding until two **years** of age was reported at 34.2%.

Cultural issues do not appear to have any negative impact on children's feeding practices. Mothers respond quickly to their babies' cries of hunger, because they accompany their mothers most of the time. There is no cultural practice of hierarchical access to food in the project area which would create a barrier to children receiving food. The low rate of exclusive breastfeeding may be due to economic constraints where a child can be left with a family member or neighbor while the mother seeks employment or attends to farming.

Typical weaning foods in the Project area include cow's milk, uji (porridge from maize and sorghum), rice, ugali (boiled maize meal), mango, papaya, carrot, squash, dark green leafy vegetables, meat, eggs, beans, and sugar.

7c.3 Nutrition Objectives

a. Maintain at 90% the number of mothers that breastfeed within the first eight hours after birth.
b. Increase from 18% to 40% the number of mothers that exclusively breastfeed in the first four months.
c. Maintain at 90% the number of children between five and nine months who are given solid or semi-solid foods.
d. Increase from 34% to 40% the number of children between 20 and 24 months who are still breastfeeding and receiving solid foods.

7c.4 Approach

HC staff, CHWs, and TBAs will be trained to request and review growth monitoring cards with mothers during each patient contact. Mothers will be educated on the importance of exclusive breastfeeding during the first four months of infancy and later to continue breastfeeding at least to 24 months. Mothers will be

urged to consider weaning as a supplement rather than a substitute for breastfeeding.

Community **barazas,** folk media festivals and village health campaigns will be used to communicate nutrition information. The HC Nutritionist will advise mothers on child welfare during antenatal visits. In addition, nutrition information is provided to patients in the HC waiting area via videos developed by MOH, UNICEF and health talks given by CHWs.

The principle constraint to breastfeeding is economics, an area that the project has little control over. Families have little if any access to areas where they can grow basic foods to feed their families. The project offers small plots for farming on the HC property to CHWs as **an** incentive for their volunteerism. Other than this, the Project has little power to help the community at-large on this issue.

7c.5 Low Birth Weight Babies

The project has no direct interventions for low-birthweight babies. Premature cases are referred to **local** maternity centers and hospitals.

Section C.7d - DIP for Maternal Care and Family Planning

7d.l Baseline information

Accurate national and local maternal mortality rates are not available. Our community survey showed the following attendants at birth: trained professionals 76%; family member 9%; neighbor 7%; TBA 2%; none 2%; and, other 3%. Ninety-six percent of mothers made two or more antenatal visits. Seventy-five percent of women correctly explained why pregnant women need to be vaccinated with tetanus toxoid and 25% did not know.

Eighty percent of respondents did not want to have children in the next three years. Of these, 67% were currently using some method to avoid pregnancies. This was broken down to pill 43%; injections 22%; IUD 12%; breastfeeding 6%; rhythm 5%; tubal ligation 4%; condoms 3%; and, barrier method 2%. Ninety-one percent of respondents were able to correctly identify a condom.

7d.2 Maternal Care Objectives

a. Increase the number of mothers with maternal cards from **57% to 75%.**
b. Increase number of women who receive two doses of tetanus toxoid while pregnant from 57% to 75%.

c. Increase percent of mothers who correctly explain the importance of tetanus toxoid vaccine from 40% to 75%.
d. Increase the percent of mothers who deliver their children by health professionals or trained TBAs from 78% to 90%.
e. Among mothers who do not want to have children over the following three years, increase their usage of modern contraceptives from 62% to 75%.

7d.3 Description of Current Maternal Care Capabilities

There are three government-run prenatal care facilities within or near the project area. They offer physical exam and palpation, STD screening, weight and blood pressure monitoring, fetal heart monitoring, nutrition counselling, vitamin supplements, and tetanus immunization. Community health nurses provide these services.

There are no intrapartum delivery services available in the project area. Postpartum care services are available through the project's HC as well as at government and private clinics in the service area. They are provided by nurses and clinical officers, and include diagnosis and treatment for commonly encountered problems. Complicated cases are referred to private or government hospitals outside the service area. The project maintains one vehicle to be used for the transport of referred obstetric emergencies.

TBA-delivered infants are brought to the HC for immunizations and birth notification. CHW's also visit homes where births have occurred.

7d.4 Population

The target population includes 10,537 women of childbearing age and 2,782 newborn children. An additional estimated 1,976 women attend antenatal care and 1,472 for family planning services at the HC who come from outside the project area.

7d.5 Approach

Prenatal Care: The HC has eight enrolled community nurses, whose training includes midwifery. Antenatal Clinic is held daily Monday through Friday. Women with complicated prenatal events are referred to the Clinical Officer for evaluation. Problems requiring specialty care are referred to appropriate outside facilities. The only screening tests are VDRL and Hemoglobin.
-Positive VDRL cases are referred to the Clinical Officer for penicillin injection. Low hemoglobin results are screened for malaria, treated with iron therapy, and followed closely.

Delivery Care: To date, the project has trained 13 TBAs. The project will train an additional 47. Only women who are currently TBA's (untrained) will be selected for training. The TBAs assist in antenatal care education and preparation for delivery, attend deliveries to assure safety and hygiene, instruct in breastfeeding, and assist in neonatal care. They complete delivery records and monthly activity checklists which are reviewed by the Project Officer.

Emergency Care: The project refers all high risk pregnancies to hospitals for delivery. At present, TBA's are trained to recognize potential complications and refer early. The HC ambulance is frequently used for obstetrical patients.

Postpartum Care: Postpartum care is provided as needed through regular HC antenatal and family planning services. In addition, project CHWs educate mothers about hygiene and nutrition, and refer mothers for treatment when health problems arise.

Family Planning Services: The project will focus on training, community education, referrals, and assuring a commodity supply. It will provide in-service training of HC staff on family planning attitudes and personal behavior; involve women and their partners in increasing awareness of the importance of birth spacing; increased referrals for modern techniques; training of CHWs, FP field educators, and TBAs; increased distribution of modern family planning interventions; and, increased use of modern family planning methods. The project will continue to collaborate with the University of Nairobi Medical and Nursing Schools and other **NGOs** working in Nairobi, including FPPS, AIDSCAP, AMREF, AVSC, FPAK, and the Marie Stopes Clinic.

CBDs have been recruited from the project's CHWs and trained to counsel men and women about birth spacing and different family planning methods. From there, the clients are referred to the HC for additional services. CBDs distribute condoms and foaming tablets when available from MOH. Currently, they do not distribute pills.

The HC nurses have been trained in family planning methods and counselling. Those who seek surgical contraceptive methods **are** referred to and counselled by the Project Officer. The services are provided free by the project through collaboration with Marie Stopes Clinic.

Men and women participate in all aspects of the family planning services, including male CHWs sensitizing other men in the community to various methods of FP; however, to date only one man has received surgical contraception.

7d.6 Health Education Messages

The project will emphasize the importance of receiving antenatal care, having trained personnel at all deliveries, and adopting appropriate postpartum care practices. Written materials on family planning are provided free of charge to patients obtaining services at the HC. Nurses give FP talks to waiting patients and a video player in the waiting area plays videos with FP messages.

7d.7 Documentation

Antenatal cards are retained by the mother and brought to the HC each visit. Lost cards are replaced when needed and updated to the extent possible. Each FP client has an individual record which is kept on file in the HC.

Section C7.e - DIP for Case Management of Childhood Acute Lower Respiratory Infections/ Pneumonia (ALRI)

7e.l Baseline

ALRI data comes from the Project's Baseline Survey and periodic HC surveillance. MOH morbidity and mortality figures are not obtainable for any of the major causes of disease in our service area. National ALRI statistics are unavailable.

1994 Baseline Survey indicated that 25% of mothers had a child with an episode of rapid and difficult breathing within two weeks of interview. At least 88% of these were treated in a health facility. We do not know what percent received antibiotics. Our most recent analysis of medical records at the HC in 1994 showed 20% of patients attending the HC come for respiratory problems. We estimate 50% to 75% of ALRI episodes are treated with antibiotics in the project area by all facilities and providers.

7e.2 Knowledge & Practice

Fifty-four percent of the survey respondents correctly identified fast or difficult breathing as a sign of a chest infection. Seventy-four percent of these were treated in a health care facility. It is believed that very few seek traditional healers. A study is planned by an advanced medical student from the University of Nairobi to investigate KAPs related to ALRI. Common treatments include keeping the child warm, administration of fluids, and cough medicine.

7e.3 MOH Policies and Protocols

MOH has developed a protocol for treatment based on the WHO algorithm, with assistance from the AID-funded Kenya Health Care

Financing Project. The MOH allows antibiotics to be dispensed by pharmacists, pharmacy technologists, and nurses. Other individuals need special approval from the chief pharmacist.

7e.4 Current Infrastructure

There are many private clinics in our project area and no information is available on their ALRI treatment practices. There is one government dispensary in the project area. Providers at this clinic have no ALRI-specific training. Antibiotics are readily available by prescription at chemist's; however, they are expensive. Drugs are not reliably available at the government dispensary. The project has trained 261 CHWs, who will receive ALRI training as part of refresher courses in 1995. It will also be integrated into training courses for new CHWs trained during the current grant period.

7e.5 Current Barriers

Reasons why children in the project area fail to receive appropriate diagnosis and care for ALRI are similar to those common to a rural, developing country. Access to care is difficult. It's also difficult for parents to take the time away from other activities to seek out care for the child. The vast majority of the families living in the project area are living at subsistence level and thus have difficulty affording the cost of treatment. While trained volunteers make referrals, they have not had ALRI-specific training. Parental recognition is also a factor; only 54% of caretakers correctly identified fast and difficult breathing as a sign of a chest infection.

7e.6 Population

The primary target population for the ALRI intervention are infants (3,097), including newborns. The secondary target population are children between one and five years (4,151).

7e.7 ALRI Objectives

a. Decrease the percentage of children with rapid and difficult breathing within the previous two weeks from 24% to 15%.

b. Increase the percentage of mothers of children with rapid and difficult breathing who seek medical treatment from 76% to 85%.

c. Increase the percentage of mothers who correctly

identify fast and difficult breathing as a sign of pneumonia from 55% to 75%.

d. Increase the percentage of mothers who correctly identify two or more methods for carrying for a child with respiratory infections prior to seeking medical treatment from 15% to 50%.

e. Provide ALRI specific training to 100% of the active CHWs in the project area and evaluate their knowledge with pre- and post- training evaluation.

7e.8 Approach

The project will provide training to HC staff, CHWs and TBAs in early diagnosis and referral. An Assistant Project Officer, who is an enrolled community nurse/trainer/midwife, will be recruited to facilitate these trainings. TBAs will be encouraged to assist in monitoring and promoting the health of very young infants, especially those under two months who are more susceptible to ALRI. Through assured access to treatment and antibiotics when indicated, the project plans to decrease hospitalization for ALRI.

The project is collaborating with UNICEF to provide essential drug kits to CHW's through the Bamako Initiative. These may allow CHW's to administer antibiotics under certain conditions. Since the majority of pneumonia deaths occur in children under two years of age, the program will emphasize the very young, especially infants under six months. Because these infants can become dehydrated and die very rapidly, early administration of the first antibiotic dose is important.

Longer-term strategies of home remedies (such as increasing fluids, feeding the sick child, proper use of medication, etc.) will be included in the training. The project also promotes the use of a low smoke cooker (maendeleo jiko), to reduce environmental contamination.

Through collaboration with the University of Nairobi's School of Medicine, an advanced medical student will conduct a survey of project area mothers on KAPs related to the treatment of children under five with respiratory illness in early 1995. The survey results will assist the project in modifying its strategy for education on ARLI.

There is no current ALRI country strategy. Nevertheless, the project continues to keep MOH informed on developments.

7e.9 ALRI Training

The project will develop a curriculum for ALRI training as outlined in section 7e.8 above, using the WHO algorithm as a starting point. Recognition and referral of the sick child will be stressed. These will be integrated into CHW refresher and new training program in 1995. These trainings will be done by the Assistant Project Officers.

7e.10 Case Management

The project currently has no formal relationships with other facilities providing ALRI case management services. The project first plans to work with it's HC staff and CHWs to train and support them in ALRI diagnosis and management. Once basic levels of training are achieved, efforts will be directed towards liaisoning with other facilities and providers.

The project has chosen co-trimoxazole as the first line antibiotic based on cost, simplicity and efficacy. It is effective against most varieties of pneumococcus and Haemophilus influenza and the most common causes of severe childhood pneumonia in this setting. Initial dose, based on the TMP component, will be 8 mg/kg. Resistance will be monitored through sentinel sites at AMREF and KEMRI.

7e.11 Supervision

The project has developed and implemented a strategy for the supervision of health workers which will encompass ALRI supervision along with other intervention activities, thus maximizing efficiency. HC nurses are currently being phased into this supervisory structure to better integrate curative and CBHC efforts. HC staff are supervised by the Medical Director, who provides in-service training and consultation on a case-by-case basis. Surveys are conducted as part of the baseline, midterm and final evaluation process. This information will be used to monitor intervention effectiveness.

7e.12 Parent/Caresivers Education

As mentioned above, there are currently no sources of parental education available in our service area. The project will emphasize early recognition of signs and symptoms of ALRI, prompt care seeking, and correct use of home remedies in it's community-targeted education initiatives. These initiatives include the CHW/CHWR/TOT trainings, barazas, and folk media festivals.

7e.13 Drus Availabilitv

The project supplies antibiotics for treatment of cases referred

to the HC. The project is able to obtain medicines at the lowest available prices and pass these savings on to the patient. The project is collaborating with UNICEF to provide essential drug kits to CHW's through the Bamako Initiative. These may allow CHW's to administer antibiotics under certain conditions.

Section C.7g - DIP for HIV/AIDS Prevention

7g.l Baseline information

According to 1993 statistics published by the National AIDS Control Program, HIV sero-prevalence levels among women attending antenatal clinics at semi-urban sentinel sites increased from 5.8% in 1990 to 17.1% in 1993. Statistics collected in 1991 indicated that 44% of STD clinic attenders were HIV-positive. In a 1993 report from the Office of the Vice President and the Ministry of Planning and National Development, the HIV-positive population in Kenya was projected to be 1,155,000 in 1995 and 1,559,000 in 1998.

Due to the current sensitivity and stigma of HIV/AIDS in the project area, the Baseline Survey did not collect prevalence data. However, it reports that 52.9% of mothers interviewed knew a person with HIV/AIDS. Currently, 2-3% of HC patients are treated for STDs.

Mothers' knowledge of HIV/AIDS is high. The 1991 Baseline Survey indicated that 99% of the mothers surveyed knew of AIDS. The 1994 survey indicated 89.9% of respondents knew that healthy looking individuals can transmit the virus. However, the 1994 survey also indicated that specific knowledge of modes of transmission and prevention was limited, especially about STDs. 1994 Survey results also indicated that 65.2% of these mothers felt it was likely they would become infected. Mothers also reported that the primary reason for this expectation was lack of control in their sexual relationships. Women in the Dagoretti community express their distrust in their partners' fidelity and lack the power in their relationships to determine use of preventive methods such **as** condoms. Condom negotiation between women and men is a well-recognized barrier to condom use in many STD/HIV/AIDS prevention programs in Nairobi. Frequently, men physically abuse their partners when they are approached with the suggestion of condom use. Alcohol abuse, **a** large male squatter population, and the proximity to the Dagoretti Market where CSW activities are high are additional factors increasing the transmission of STD/HIV/AIDS in the Dagoretti area.

7g.2 Objectives for the prevention of HIV/AIDS

a. Increase the percentage of women with children under

two who know two or more symptoms of STDs from 19% to 40%.

b. Increase the percentage of mothers knowing two or more ways to prevent the transmission of STDs from 36% to 50%.

c. Increase the percentage of mothers who know two or more ways to prevent HIV/AIDS transmission from 23% to 50%.

d. Maintain the percentage of mothers with knowledge that healthy-looking persons can be HIV positive at 90%.

e. Increase condom use by mothers of children under two from 12% to 25%.

f. Increase the percentage of mothers who are willing to interact (shake hands, share meals, live in same house, wash PWA) with a person with HIV/AIDS from 70% to 80%.

7g.3 Current activities related to HIV/AIDS prevention in the project area

The AIDS Program Secretariat (MOH) and the National AIDS Control Program are dedicated to addressing the problems of HIV/AIDS through cooperation with NGOs and the University of Nairobi through the Kenya AIDS NGOs Consortium. They provide support with IEC materials, condoms, and guidance support for NGO programs in addition to their own national activities.

Currently, there are no other organized HIV/AIDS activities in the project area. This project functions as the MOH's representation for the project area.

The project staff have varied levels of involvement and training in facilitating HIV/AIDS programs. The Project Officer is a trained AIDS counsellor and was recently trained as a TOT for AIDS counsellors by CHAK. Family planning nurses seconded by the MOH have been trained in basics of AIDS counselling in conjunction with FP counselling services. One has recently been trained as a TOT counselor by the Kenya Association of Professional Counselors. The MIHV Health Educator is currently conducting AIDS counselling services, although difficulty with the local language limits the extent of outreach. Organizing and motivating youth groups in community education on HIV/AIDS is also underway.

Implementation of HIV/AIDS-related activities has been repeatedly requested by the community. Integration of these activities into the established CBHC and HC will facilitate the effectiveness of

the intervention. However, Dagoretti has a strong community stigma in the subject of AIDS that will be difficult to overcome. Financial limitations for HIV testing and treatment for opportunistic infections is a major barrier. Obstacles to full implementation of the AIDS intervention program may depend on outside variables such as the negative effects of media announcements that condoms being distributed are pre-infected with HIV or that AIDS is really an "American idea to discourage sex. "

7g.4 Population

Project target populations for HIV/AIDS interventions include 10,537 women of childbearing age, 15,602 men between 15 and 49 years of age, and 7,438 children between five and 14 years of age.

7g.5 Approach

The project plans to address HIV/AIDS in the Dagoretti community through the following activities:

* Community education about HIV/AIDS transmission, prevention, and care of the sick, through barazas, folk media festivals and puppetry/drama.
* Distribution of IEC materials on HIV/AIDS, STDs, condom use, and counselling services. Specific IEC materials will be bought or developed and produced for target populations, such as youth, those who are interested in using condoms, and local high-risk groups such as bar patrons.
* Enhancing the STD/HIV/AIDS component of trainings for CHWs, TBAs and CBDs so that they may better advise the villagers about diagnosis, treatment, and prevention. This CBHC outreach service targets mostly women in the villages.
* Train CHWs, CBDs, TBAs, and HC nurses in counselling skills so that they may better advise clients on prevention and negotiation with partners on safer sex, i.e. condom negotiation and sticking to one partner.
* Counsellors will be trained by the Project TOTs.

Trainings for project staff in prevention methods for STDs/HIV/AIDS will include the regular trainings the nurses receive from FPPS in family planning counselling, the FPPS trainings for CBDs, and the counsellor trainings that the project plans to conduct.

Education methods such as puppetry, folk media, and theater will be incorporated into activities for CHWs, TBAs and CBDs as well as leaders of target groups from the community, i.e. youth groups.

7g.6 Health education messages

Community barazas and folk media festivals introduce the general public to issues about HIV/AIDS and allow the community members to ask questions. They also give the opportunity to distribute IEC materials for those who might not otherwise have access due to the remote locations. Teaching individual groups to create songs and dances about health messages has increased their own knowledge and comfort with the issues so that they can advise their neighbors and friends.

Youth groups learn most efficiently in peer settings. One group of young men that operate in the Dagoretti Market is very interested in learning about health issues, especially around STDs including HIV/AIDS. Potential benefits from working with this group include their ability to educate in many settings of Nairobi where they frequent, but also the interest in performing dramas about HIV/AIDS in the communities. Another group of young idle men in a remote village of the project area nicknamed Saigon, is benefitting in learning about health issues but also that their idleness has been broken and they seem more interested in mobilizing themselves to follow another lifestyle.

Working with church groups will enable the project staff to concentrate on the community's need to accept HIV-positive people and care for them. General problems of stigma can be addressed with the assistance of clerical leaders, and specific materials developed for clergy through MAP International with funding from AIDSCAP will soon be available. The church has great impact on the Dagoretti community and it will be in the project's interest to collaborate closely with them.

School groups have requested seminars from the project staff regarding HIV/AIDS and teen pregnancies. Along with the project staff, a HC nurse and CHW conduct the presentations. School groups have been encouraged to participate in activities such as folk media festival education and developing a peer education group.

Counselling services allow private and confidential discussions about STDs/HIV/AIDS. Due to the high level of stigma in the community the services will be advertised along with general counselling services. Those who are 'worried well' as well as those who are referred from the patient population of the HC will be counselled.

Message	Community	Youth	Church	2nd School	Prim. School
Signs/symptoms	X	X	X	X	
Prevention					
Keep one partner	X	X	X	X	
Abstinence	X	X	X	X	**X**
Condoms	X	X	X		
Transmission modes	X	X	X	X	X
Acceptance for PWAs	X	X	X	X	X
Need for Counseling	X	X	X	X	X
Care of PWAs	X	X	X	X	X
Proper STD treatment	X	X	X	X	

Section C.7h - DIP for Environmental Health

7h.l. Baseline Information

Due to the population density within the project area, environmental health interventions have been adopted, including increased access to latrines in good condition, proper garbage disposal, and decrease in the rate of childhood burns. The 1994 KPC survey revealed that 87% of mothers had access to latrines in good condition (i.e. with a sound floor, wall, door, and roof) and 71% had access to proper garbage disposal. Although the rate of burns in children had decreased from ten percent in 1991 to five percent in 1994, continued promotion of child-safe cooking environments is still needed.

7h.2. Environmental Health Obiectives

a. Increase the percentage of mothers from 87% to 90% with access a pit latrine in good condition.

b. Increase from 71% to 80% the number of community members with access to proper garbage disposal.

c. Maintain at 5% or reduce the percentage of children with burns occurring in a two week period.

7h.3. Population

The project area population is estimated at 42,000. Although these environmental health objectives are primarily directed at reducing morbidity in children under five who number 5,466 in the project area, these objectives will also reduce morbidity in the entire population.

7h.4. Approach

New and refresher training of CHWs includes instruction on proper home sanitation and home hazard reduction. Specifically, CHWs are required to have model households with a latrine in good condition (sound floors, walls, roof and door). Unless garbage pickup is available, garbage pits are encouraged to prevent trash being thrown away at random or in heaps. On a monthly basis, village health campaigns are conducted which include home-to-home visits by CHWs and project staff to promote environmental hygiene. The MOH has also been asked to second a Public Health Technologist who will be stationed at the project's HC. This person will become primarily responsible for the environmental health activities.

Protection of cooking areas from children is also promoted in CHW trainings. The Maendaleo jiko (a low smoke, low cost, fuel-efficient stove) and fireless cooker (a low cost, newspaper-insulated basket which allows food to continue cooking after being removed from the heat source) are also promoted through the CHWs to reduce smoke within the households.

Section D. DIP SUSTAINABILITY STRATEGY

D.l Sustainability plan

The goal of this Child Survival Project is to have a health center and community based health care project that continue after the conclusion of the current cooperative agreement with USAID in 1997. The goal of sustainability is of paramount importance to this project. It features heavily in all discussions among project staff in the field and the home office. Following are the objectives for this final funding cycle:

Identify and develop appropriate revenue sources that can be used to sustain the project beyond September 1997. This will include local and international, private and public donors, HC user fees, seconded staff, in-kind donations, and other sources of support.

Develop relationships with local sources of technical/management/finance expertise who can assist the project in the areas of medical care, public health, income generating projects, marketing, administration and financial management. See Section D3 for a listing of sources.

Identify staffing and administrative needs for the project and recruit, select and train national staff to meet these needs. This will involve mentoring trained nationals into positions of project administration and management.

Develop incentives to sustain volunteers on an on-going basis. These include income generating activities, non-monetary rewards, training, credentialing, and other incentives.

Expand the community's involvement in all aspects of the project's governance.

Following are the indicators the project will use to track progress towards sustainability:

a. Ongoing flow of benefits to the beneficiaries via a functioning clinic and community-based health care program.
b. More than 90% of HC staffing needs are met by MOH.
c. Eighty percent of non-medical HC support wages and other clinic operating costs met through patient cost-sharing mechanisms (including income generated by fees of patients referred by CHWs/TBAs). The remaining ten percent will be met through fees paid by patients referred to the HC by CHWs/FP field educators.
d. Ten percent of patients referred to HC by CHWs/TBAs.

e. Turnover rate of active CHWs limited to no more than 20% by the end of the project.
f. Placement of nationals in key positions within the project.

Much of the project's success has been the result of local support from several key partners. The MOH has seconded staff to the HC; the Chandaria Foundation has provided financing for the construction of the HC; the community has provided thousands of hours of volunteer time; and, a variety of NGOs and governmental/bilateral agencies have assisted with material and technical assistance. The on-going support of these entities is necessary for the successful continuation of the Project. Over the next 30 months, project staff will be formalizing these relationships to insure continuity of services.

D.2 Community involvement

Community-based committees were established when the project was started as a way to link the project with the community. These volunteer committees include the Joint Health Committee (oversees the overall HC and CBHC project), the three Area Health Committees (represent the communities of Waithaka, Mutuini, and Ruthimitu) , and the Board of Management (oversees the operations of the HC). These committees are the community's voice in the planning for the future of the project.

Through these committees and regular meetings with the HC staff and CHW volunteers, the community has identified priorities for the project. A primary concern continues to be HIV/AIDS awareness and prevention. The community has also expressed interest in developing specialty clinics. Monthly diabetes, dermatology, and dental clinics are currently scheduled. Plans exist to expand the premises to accommodate these services more efficiently.

At the inception of the project, community members helped to identify the site where the HC was to be built and assisted in acquiring land from the NCC. In addition, community elders assisted MIHV with introductions to the leaders of Dagoretti which resulted in meetings with other village elders and decision makers. There they discussed the community-based health care program and agreed to participate. CHWs are motivated, attending project activities such as barazas, local school presentations, and cooperation with community nurse trainings and disease screening programs with AMREF.

Because the majority of the people living in the project area are poor, most of the inputs from the community are in the form of donated time. The health committees continue to be involved in the recruitment, training and supervision of volunteer CHWs, TBAs

and CHWRs who also provide services to the community free of charge. The community supports the project through a cost sharing program at the HC based on patient fees for curative services and medicines.

The Project Officer and Deputy Director will train members of the Joint Health Committee in program governance, fundraising, and general administration in 1995. It is expected that this committee will raise funds on its own to meet its operating expenses and also to contribute toward other projects such as for the expansion of the HC.

D.3 Collaboration

This Child Survival Project is a joint operation between MIHV, the Chandaria Foundation and the MOH. The MOH provides US $1,600 per month for salaries of 15 seconded staff. It also supplies vaccines and contraceptives for distribution at the HC. The Chandaria Foundation has provided financial, logistical and managerial support to the project. Both the MOH and Chandaria Foundation are represented on the project's Board of Management.

Strengthening the relationships with the University of Nairobi Medical and Nursing Schools will provide multiple opportunities for learning by students, faculty, clinic staff, and community volunteers; improved quality of care; further integration of the HC with the CBHC; and research of community needs.

The project has gained recognition from the MOH as being a model for community clinics in Kenya. The user-fee model that has been developed at the HC is being discussed as a model for other MOH clinics in Nairobi. As a result of this recognition, several organizations have expressed strong interest in working with the project. These include:

The University of Nairobi has several departments interested in the project as a training and research site.

The Rotary Club is represented on the project's Board of Management and assists with the provision of equipment and materials. They have provided the project with funding for construction and installation of solar back-up equipment for maintenance of vaccines and laboratory services, facility improvement costs, and audio-visual equipment for educational programs.

Family Planning Private Sector **(FPPS)** has provided family planning and HIV/AIDS training to seven Project Clinic Nurses and CBD training for six CHWs. They have also provided commodities such as contraceptive pills, condoms, condom dispensers/brochures, and fp clinic supplies. FPPS

provided a one time grant to the project which included salaries for two family planning field educators. They have provided training on use of folk media and puppetry to disseminate health messages. The HC is also used by FPPS as a training site for community nurses in family planning and has cooperated with the CBHC program in home-visiting and community surveys. Currently, FPPS is assisting the Project Director in assessing the Project's fee-for-service system.

Kikuyu Hospital has trained project TBAs. It has also provided training on equipment sterilization procedures. The Hospital serves as a referral target for the project.

The African Medical and Research Foundation (AMREF) has assisted with setting up the HC laboratory, conducting quality assurance evaluations, and providing consultations on other relevant health needs. AMREF has also utilized the project to facilitate studies and as a demonstration site for professionals and students from Kenya and elsewhere.

United Nations Children's Education Fund (UNICEF) has provided a one-time donation of essential drugs and TBA kits. The project participates in the Day of the Child sponsored by UNICEF, which is an immunization outreach program for children. The CBHC project is currently exploring the possibility of working with UNICEF to implement the Bamako Initiative.

Through **Marie Stopes International**, the project provides free services for surgical contraception at the HC monthly. Marie Stopes provides the surgical procedures and the project provides support services.

The Embassy of the Netherlands provided an ambulance to the project.

The Embassy of Japan provided an equipment grant for the AIDS intervention.

The Christian Association of Kenya (CHAR) has trained a Community Nurse and the Project Officer in HIV/AIDS counselling.

Through it's participation in the **Kenya AIDS NGOs Consortium**, the project has acquired skills training and educational materials from other NGOs. **The Kenya Association of Professional Counsellors (KAPC)** has offered two participants in TOT training for HIV/AIDS counsellors. Also through the Consortium, **CARE International** has sponsored two places for the project in a workshop to train educators in the use of theater and drama in disseminating information.

The key local institutions expected to take part in sustaining project activities beyond 1997 are the **Chandaria Foundation** which is a major local donor and provider of management support, the **University of Nairobi School of Medicine** which may assist in addressing the project's technical/medical needs, **MOH** in their seconding of clinic staff, and the **Nairobi City Council**.

During the remaining 30 months of the current cooperative agreement, the project will be actively seeking opportunities to collaborate with other organizations, agencies and individuals. Formalize relationships will be developed to insure the sustainability of the project beyond the conclusion of direct USAID financial support

D.4 Phase-over plan

Phaseover plans are still in the process of discussion with project staff, MIHV headquarters office, and key partners in the local management of the HC as mentioned above in section D.3 Collaboration. Therefore the outline below is tentative.

year	phaseover event
1995	* Recruitment of a national as medical director
	* Hiring of a national medical director/departure of expatriate medical director
	* Contingency plan developed for baseline operations at end of USAID funding
	* Trainings for TOF and most TOT positions completed
	* Recruitment of a national as project director
	* Hiring of a national project director/departure of expatriate project director
	* Hiring of an international as deputy project director
1996	* Project Director establishes cooperative discussions with local agencies regarding health center program integration with agency programs, (i.e. AMREF involvement in community-based health care trainings)
	* TOFs and TOTs begin training under supervision of project officer and deputy director
	* Project Director and Project Officer begin writing grants to funders for CBHC support
	* Agency involvement in CBHC program functional with support from MIHV, i.e. Project Officer positions

D.5 Cost recovery

The Project Director, Michael Smyser, has responsibility for the

implementation of project cost recovery strategies.

The project has successfully introduced a fee-for-service mechanism to recover a portion of the costs of providing services. Currently, revenues off-set 68% of expenses. The difference between revenues and expenses is due to the discontinuation of the essential drug kits and the 200% inflation rate for pharmaceuticals and other medical supplies. The remaining expenses are covered by USAID and other outside funding sources. This is the portion that will need to be covered after 1997 - either by new funding sources or by curtailing services.

The Project Administrator and the Project Director reassessed financial controls and patient tracking systems to ensure efficiency. Plans are also being made to expand the HC to include a dental, psychiatric, and other specialty clinics (e.g. dermatology, ENT, etc.). These clinics will use fee-for-service.

In early 1995 the Project Director and FPPS have been reassessing the HC's fee structures to establish the most effective cost recovery levels while insuring that services remain accessible to the poor. Results were presented and shared with other health centers in a workshop/seminar coordinated by the Management Sciences for Health-Kenya Health Care Financing Project in February 1995.

Other local means of raising financial support for the project exist and are being explored. The Chandaria Foundation, which financed the construction of the HC, has expressed an interest in providing long term support for the project. The Joint Health Committee is registering itself as Dagoretti Community Health Volunteers so that it can raise funds. This group is also organizing to raise funds for the HC through a community harambee, scheduled for July 1995. Other possible funding sources include local and international businesses, Rotary, governments, and other entities.

Section E. PROJECT MONITORING HEALTH INFORMATION SYSTEM

E.l HIS plan

The objectives of the Project HIS are to:

a. Develop a system to track CHW and TBA activity by June 1995.
b. Improve tracking of CHW referrals for preventative and curative health services.
c. Improve tracking of HC referrals for follow-up home visits by CHWs and TBAs.
d. Strengthen HC statistical evaluations to determine disease incidence by geographic location, age and sex.
e. Strengthen HC statistical evaluations to determine use of preventive services by geographic location (project versus non-project patients).

The accompanying budget includes a consultant who will assist the project in overhauling it's HIS system for the HC and establishing an HIS for the CBHC project. The Project Director, Michael Smyser, is responsible for the project's HIS. Mr. Smyser is a trained epidemiologist.

Currently, the primary source for project health data are HC records. Due to the HC's location on the edge of the project area and the wide popularity of the services offered, the HC's patient population is not consistent with the project area's population. Therefore, an HIS for the use of the CBHC is being planned.

Each CHW will be asked to submit a monthly report to their respective community health worker representative (CHWR). The CHWR will then submit a completed summary to the Program Officer. It is estimated that each CHW will spend approximately 30 minutes per month filling out the form and the CHWR an additional hour to collect and summarize the information. This will total approximately 2,500 hours of volunteer time per year.

To insure sustainability of the HIS, the project will utilize a manual rather than computer-based system. These records will also be able to be computerized on a regular basis when more indepth analyses are required.

The project's HIS system will be fully operating by the end of 1995.

E.2 Census information

The 1994 Baseline Survey interviewed only mothers of children two years and younger. The Government of Kenya conducted a population census in 1989, of which the results were released in mid-1994. This population census is the best available data for the

project. From this census the project area population is estimated at 42,000 based on 1989 census data with a projected growth rate of 5%. Details are reported in the 1994 Final Evaluation.

E.3 Data collection and use

The following data will be collected from the project:

# of health center staff trained
# of CHWR/CHWs trained
# of CHWR/CHWs attending refreshers
# of FP field educators trained
# of TBAs trained
# of TBAs/CHWs submitting monthly reports
# of community members at meetings
# of CHW home visits by # of persons instructed and health topic
# of referrals to HC by reason for visit
# of cases treated at HC by location, age, sex and diagnosis
# of clients attending HC for ANC by location, age, vaccination status, parity and gravity
# of clients attending HC for child welfare services by location, age, vaccination status and weight.
# of Health Committee members trained
# of clients attending HC for FP by location, age and FP method
# of condoms distributed

These data will be collected by the CHWs and the HC nurses on a monthly basis. Under the Project Director's supervision, the CHWRs will compile monthly reports from CHWRs which the Deputy Director will compile into quarterly reports. The Charge Nurse will compile quarterly reports for the HC. Random checks will be made by the Project Director to insure accuracy of reporting. Confidentiality will be assured by only reporting total number of activities. Data will be stored at the HC.

Data will be reviewed during project staff meetings including CBHC and HC staff, committee meetings, and between the CHWRs and CHWs. The Program Officer will assist the Project Director in documenting lessons learned. Monthly reports are shared with the MIHV home office.

The data will be used to educate the community on its health status and the development of the project. It will also be used to help make management decisions related to the project in areas such as adjusting fee structures, redirecting resources, altering training curricula, etc.

E.4 HIS training for staff

A consultant will be hired to review the project's HIS needs, develop a sustainable system, and train project staff. Then, the CHWs and CHWRs will be trained in completing the monthly reporting forms and tally sheets. Currently, most of the HC data collection follows the standardized reporting format for the MOH, which is preferred by the MOH-seconded staff.

E.5 Baseline survey inputs

For the 1994 Baseline Survey, project staff were instructed by the Project Director, who is a trained epidemiologist. Data collection done in the field was supervised by the project staff. Data analysis and interpretation was conducted by the Project Director and two external evaluators.

Section F. HUMAN RESOURCES

F.1 Organization chart

See Attachment F.

F.2 Community groups

There are three functioning Area Health Committees which have representation on the project's Joint Health Committee. Each of the three Area Health Committees has fifteen members and represents one of the subdivisions served by the project: Mutuini, Ruthimitu and Waithaka. The Joint Health Committee is consulted on issues pertaining to the entire project, both the HC and the CBHC. The HC is directly overseen by the Board of Management on which three representatives from the Joint Health Committee participate. Each of these committees meets monthly.

The CHWs meet as a group with the project staff monthly. In addition, the CHWs meet monthly within their local areas.

F.3 Community health workers

There are currently 261 community health workers (CHWs) associated with the project. The project will train an additional 150 CHWs by August 31, 1997 to insure an active base of 300 active CHWs in the project area. According to the current population estimate of 42,000 and the baseline survey indicating an average household size of 4.6, each CHW will cover approximately 30 households. In addition, the project is committed to having 100 active TBAs trained by the end of USAID funding resulting in a TBA:household ratio of 1:91.

F.4 Volunteer turnover

The current drop out rate of volunteer CHWs in Kenya is estimated to be 20%. Turnover rates of CHWs vary greatly from project to project. Projects that have provided monetary incentives for their volunteers have experienced high dropout rates when outside funding ceased. Urban projects have also been shown to have higher attrition rates than rural projects due to the fluid nature of the communities.

This project has struggled with the issue of providing incentives for CHW volunteers and has learned many lessons. Monetary rewards have been requested by volunteers and the project has spent time and energy to educate the community about volunteerism. The project staff recognizes the economic needs of the volunteers, especially in a poor community.

To acknowledge the volunteers' efforts the project has established IGAs and restricted involvement to active CHWs. Lessons learned are that group/cooperative IGAs are difficult to manage and maintain. CHW groups require a great deal of support and training in business operation and management.

IGA consultants from cooperating agencies have evaluated this incentive program and have advised the project to focus on health-related IGAs. Therefore, the project is negotiating with UNICEF to establish a modified form of the Bamako Initiative as an IGA for the project's CHWs. Other IGA options include the selling of low-smoke cookers and latrine slabs.

The 20% volunteer dropout rate is incorporated into the planning target of training 150-160 new CHWs. Recognizing that volunteer recruitment and training are on-going needs for any volunteer program, the project will also train TOFs and TOTs from the MOH staff as well as from within the community volunteers. They will then be directly involved in the recruitment and training of CHWs after 1997.

F.5 Technical assistance

The project will hire an HIS consultant to assess health information needs, plan out and set up the system. This consultant will also provide training to the project staff. The project will also seek technical assistance to further develop the IGAs. Technical training for laboratory technicians, clinical officers, and nurses will be sought from FPPS and AMREF to assist in the implementation of the HIV/AIDS interventions.

F.6 Role of country nationals

Over 90% of the project staff are nationals. Currently, there are only three MIHV international staff in the project who are gradually relinquishing responsibilities over to the national staff. Several nationals in key positions have been paired with internationals. This has improved the transfer of knowledge, skills and expertise, better preparing the nationals to manage the project. National staff have acquired basic computer skills, including word processing and data base management. For the CBHC program the national staff have been able to attend numerous trainings and certification courses, including family planning training, HIV/AIDS counselling, theater and drama, folk media, puppetry, and first aid.

Recruitment for a national Medical Director is under way to replace one of the international positions. The international Medical Director will assist in recruiting and training in his replacement. The Provincial Medical Office and the Board of Management representative from the University of Nairobi School

of Medicine have are also assisting with this search.

F.7 Role of headquarters staff

The MIHV Program Officer, Garth Osborn, is the principle individual from MIHV's home office responsible for technical backstopping of this project. He made his first annual site visit in November 1994. The main purpose of these visits is to develop consensus between home office and the field on project direction and to provide general support to the field staff.

Section G. TRANSPORT AND LOGISTICS

G1. Transport

Currently, the project owns three vehicles in various states of repair. The project is more sustainable with two versatile vehicles in good repair. Vehicle maintenance costs are covered by the project funds. If there is no donor funding for vehicle maintenance in the future it is possible to operate the project with one vehicle which can be maintained with HC income.

The project currently employs a driver/office clerk to facilitate scheduling of meetings, maintenance of vehicles, and delivery of supplies for the clinic. In addition, MIHV volunteers and senior project staff are required to be able to drive.

G2. Procurement

The project plans to acquire the following items prior to the end of the current cooperative agreement:

- large tent for community education
- public address system for community education
- vehicle replacement
- 2 computers
- 1 laser printer
- computer software
- 1 locking file cabinet
- printing costs for development of IEC materials
- CHW and TBA training manuals / graduation kits

Section H. DIP SCHEDULE OF ACTIVITIES

Table D: Schedule of Activities is included as Attachment H.

DIP TABLE A: FIELD PROJECT SUMMARY

PVO/Country: MiHV/KENYA Project Duration (mm/dd/yy): start date September 1, 1994 estimated completion date August 31, 1997

1. BUDGET SUMMARY IN U.S. DOLLARS

(a)	(b)	(c)	(d)
a. By year of project	USAID Contribution (field + HQ)	PVO Contribution (field + HQ)	Total Contribution (field + HQ)
Year 1	$290,499	$129,622	$420,121
Year 2	$329,078	$112,260	$441,338
Year 3	$317,731	$96,233	$413,964
Country project total	$937,308	$338,115	$1,275,423

b. Percent of PVO Match	27%

(PVO Contribution divided by Total Contribution: sum of column "c" divided by the sum of column "d")

2. SIZE OF THE POTENTIAL BENEFICIARY POPULATION

Note: POTENTIAL BENEFICIARIES are defined as those in the project area who are eligible to receive services for a given intervention, not the percent you expect to provide services to – which may be smaller than the eligible population.

(e)	(f)
a. Current population within each age group*	Number of Potential Beneficiaries
infants, 0–11 months	1,315
children, 12–23 months	1,022
children, 24–59 months	3,129
children, 60–71 months (If Vitamin A component)	
females, 15–19 years (high risk pregnancy)	2,236
females, 20–34 years	6,559
females, 35–49 years (high risk pregnancy)	1,742
Other: Children <5 seen at HC for curative care	8,676
Other: Women seen at HC for ANC and FP	3,448
b. Additional births	
Total estimated live births, years 2 and 3	2,782
c. Total Potential Beneficiaries	30,909

• Note: Females (ages 15 – 49) should only be included as potential beneficiaries where they are direct beneficiaries of services (for example, TT immunizations, or family planning services), and not for educational interventions (for example, education on proper use of ORT).

3. PERCENT OF TOTAL USAID CONTRIBUTION by INTERVENTION

Percentages must add to 100%.

INTERVENTION	Percent of Project Effort (%)	Percent of USAID Funds in US $
a. Immunization	10	$93,731
b. Control of Diarrheal Diseases	10	$93,731
c. Nutrition	10	$93,731
d. Vitamin A		$0
e. Iodine		$0
f. Control of Pneumonia	10	$93,731
g. Maternal Care/Family Planning	25	$234,327
h. Malaria Prevention & Management		$0
i. HIV/AIDs	25	$234,327
j. Other: Environmental Health	10	$93,731
k. Other (specify)		$0
l. Other (specify)		$0
m. Other (specify)		$0
TOTAL	100%	$937,308

4. CALCULATION OF USAID DOLLARS per BENEFICIARY per YEAR

a. Total USAID Contribution to Country Project (sum of column "b" in table 1, this page)	$937,308
b. Total Potential Beneficiaries (sum of column "f" in table 2, this page)	30,909
c. USAID Funding per Beneficiary for Project (line a. divided by line b. in table 4, this page)	$30.32
d. USAID Funding per Beneficiary per year (line c. above divided by 3 years)	$10.11

LOTUS 94DPTBAI .WKI

ATTACHMENT A

TABLE A: FIELD PROJECT SUMMARY

5. ACTIVITIES: Circle all activity codes that apply for each intervention.

(a) Immunization

1 = Distribute vaccines
(2) = Immunize mother/children
(3) = Promote immunization
(4) = Surveillance for vaccine preventable diseases
5 = Training in immunization
Other _____ (specify)

(b) Control of Diarrhea1 Diseases

(1) = Distribute ORS Packages
(2) = Promote use of ORS packets
3 = Promote home-mix
(4) = Promote SSS home-available fluids
(5) = Dietary management of diarrhea
(6) = ORT training
(7) = Hand washing
Other _____ (specify)

(c.) Nutrition

1 = Distribute food
(2) = Provide iron, folic acid, vitamins
(3) = Provide scales and growth charts
4 = Sponsor mother-to-mother breastfeeding/promotion support groups
(5) = Conduct food demonstrations
(6) = Counsel mothers on breastfeeding
7 = Conduct group sessions
8 = Training in breastfeeding and weaning
(9) = Training in maternal nutrition
(10) = Training in growth monitoring
Other _____ (specify)

d. Vitamin A

1 = Wt. A deficiency treatment
2 = Vii. A supplementation
3 = Vii. A fortification
4 = Vii. A education
5 = Vii. A food production
Other _____ (specify)

e. Iodine

1 = Iodine deficiency treatment
2 = iodine supplementation
3 = Iodine fortification
4 = iodine education
5 = Iodine food production
Other _____ (specify)

(f.) Control of Pneumonia

(1) = Promote antibiotics
(2) = Health education
(3) = Improve referral sites
4 = Training
Other _____ (specify)

(g) Maternal Care/Family Planning

(1) = Distribute contraceptives
(2) = Promote exclusive breastfeeding to delay conception
(3) = Promote child spacing or family planning
(4) = Antenatal care
5 = Promote malaria prophalaxis
(6) = Train TBAs in improved birth practices
(7) = Family planing training
(8) = Improve Referral Sites
Other _____ (specify)

h. Malaria Prevention and Management

1 = Residual insecticides
2 = Larvaciding
3 = Provision of bednets
4 = Provision of commodities
5 = Treatment
6 = Health education
7 = Training
Other _____ (specify)

(i.) HIV/AIDS Prevention

(1) = Distribution of condoms
(2) = AIDS education
(3) = HIV testing and counseling
Other _____ (specify)

(j.) Other

Specify: Environmental Health

k. Other specify:

l. Other specify:

DIP TABLE B: PROJECT GOALS AI OBJECTIVES

PROJECT GOALS

1. Reduce morbidity and mortality of children under five.
2. Reduce morbidity and mortality in women of childbearing age.
3. Foster program sustainability

(1) Project Objectives by	(2) Measurement Method	(3) Major Planned Outputs	(4) outputs	(5) Measurement Method
I. IMMUNIZATION (EPI): A. Maintain at 95% the number of children 12 to 23 months who received DPTI. B. Maintain at 95% the number of children 12 to 23 months who received DPT3. C. Increase from 86% to 90% the number of children who received measles vaccine. D. Maintain the dropout rate of children 12 to 23 months between DPTI and DPT3 at 5%. E. Maintain at 99% the number of children 12 to 23 months who received BCG. F. Increase from 83% to 90% the number of children who are receiving OPV3. G. Increase from 73% to 80% the number of children fully immunized by 11 months of age. H. Increase from 34% to 50% the number of mothers in the project area have received at least two doses of TT vaccination. I. Increase from 40% to 75% the number of mothers who mow that tetanus toxoid protects both the child and the mother against tetanus.	A,B,C,D,E,F,G,H,I: 1. Midterm and final KPC survey	A,B,C,D,E,F,G,H,I: 1. Train 60 volunteer training Facilitators 2. Provide refresher training to 60 CHWRs 3. Train 6 ECNs to become TOTs 4. Provide in service training to improve HC “no miss” policy. 5. Train approximately 150 new CHWs to maintain at least 300 active CHWs 6. Provide refresher training for 300 existing CHWs 7. Provide opportunity for all CHWs to participate in health related income generating	A,B,C,D,E,F,G,H,I: 1. Trained TOFs train new CHWs and provide refresher training to previously trained CHWs. 2. CHWRs make supervisory visits with other CHWs and ensure that CHW monthly reports are completed. 3. ECNs as TOTs train new CHWs, provide refresher training to existing CHWs, make supervisory home visits with CHWs, compile monthly statistics from CHW reports. 4. Strategy developed with HC staff to improve HC “no miss” policy. 5,6. CHWs make home visits.	A,B,C,D,E,F,G,H,I: 1. Training records. 2. CHWR reports 3. Training records 4. HC records 5,6. CHW monthly reports

ATTACHMENT C

(1) Project Objectives by	(2) Measurement Method	(3) Major Planned Outputs	(4) outputs	(5) Measurement Method
II. CONTROL OF DIARRHEAL DISEASE (CDD) A. Increase percent from 77% to 85% the number of infants under 2 years who continue to breastfeed the same amount or more during each diarrhea1 episode. B. Increase from 67% to 80% the number of children under two who receive the same amount or more fluids other than breast milk during a diarrhea1 episode. C. Increase from 51% to 60% the number of children under 2 years who receive the same amount or more food during a diarrhea1 episode. D. Increase from 36% to 45% the number of children under 2 years who receive ORT.	A,B,C,D: 1. Midterm and final KPC survey	A,B,C,D: 1. Train 60 volunteer training facilitators 2. Provide refresher training to 60 CHWRs 3. Train 6 ECNs to become TOTs 4. Provide inset-vice training to improve HC “no miss” policy. 5. Train approximately 150 new CHWs to maintain at least 300 active CHWs 6. Provide refresher training for 300 existing CHWs	A,B,C,D: 1. Trained TOFs train new CHWs and provide refresher training to previously trained CHWs. 2. CHWRs make supervisory visits with other CHWs and ensure that CHW monthly reports are completed. 3. ECNs as TOTs train new CHWs, provide refresher training to existing CHWs, make supervisory home visits with CHWs, compile monthly statistics from CHW reports. 4. Strategy developed with HC staff to improve HC “no miss” policy. 5,6. CHWs make home visits.	A,B,C,D: 1. Training records. 2. CHWR reports 3. Training records 4. HC records 5,6. CHW monthly reports
III. NUTRITIONAL IMPROVEMENT: A.Maintain at 90% the number of mothers who breastfeed within the first eight hours of birth. B. Increase from 18% to 40% the number of mothers who exclusively breastfeed in the first four months. C.Maintain at 90% the number of children between five and nine months who are given solid or semi-solid foods. D. Increase from 34% to 40% the number of children between 20 and 24 months who are still breastfeeding and receiving solid foods.	A,B,C,D: 1. Midterm and final KPC survey	A,B,C,D: 1. Train 60 volunteer training facilitators 2. Provide refresher training to 60 CHWRs 3. Train 6 ECNs to become TOTs 4. Provide inservice training to improve HC “no miss” policy. 5. Train approximately 150 new CHWs to maintain at least 300 active CHWs 6. Provide refresher training for 300 existing CHWs	A,B,C,D: 1. Trained TFs train new CHWs and provide refresher training to previously trained CHWs. 2. CHWRs make supervisory visits with other CHWs and ensure that CHW monthly reports are completed. 3. ECNs as TOTs train new CHWs, provide refresher training to existing CHWs, make supervisory home visits with CHWs, compile monthly statistics from CHW reports. 4. Strategy developed with HC staff to improve HC “no miss” policy. 5.6. CHWs make home visits.	A,B,C,D: 1. Training records. 2. CHWR reports 3. Training records 4. HC records 5,6. CHW monthly reports

(1) Project Objectives by	(2) Measurement Method	(3) Major Planned Outputs	(4) outputs	(5) Measurement Method
IV. MATERNAL CARE AND FAMILY PLANNING: A. Increase the number of mothers with maternal cards from 57% to 75%. B. Increase the number of women who receive two doses of tetanus toxoid while pregnant from 57% to 75%. C. Increase the percent of mothers who correctly explain the importance of tetanus toxoid vaccine from 40% to 75%. D. Increase the percent of mothers who deliver their children by health professionals or trained TBAs from 78% to 90%. E. Among mothers who do not want to have children over the following 3 years, increase their usage of modern contraceptives from 62% to 75%.	A: 1. Midterm and final KPC survey	A: 1. Train 60 volunteer training facilitators 2. Provide refresher training to 60 CHWRs 3. Train 6 ECNs to become TOTs 4. Provide in service training to improve HC “no miss” policy. 5. Train approximately 150 new CHWs to maintain at least 300 active CHWs 6. Provide refresher training for 300 existing CHWs 7. Train 6 CBDs to maintain at least 12 active CBDs	A: 1. Trained TFs train new CHWs and provide refresher training to previously trained CHWs. 2. CHWRs make supervisory visits with other CHWs and ensure that CHW monthly reports are completed. 3. ECNs as TOTs train new CHWs, provide refresher training to existing CHWs, make supervisory home visits with CHWs, compile monthly statistics from CHW reports. 4. Strategy developed with HC staff to improve HC “no miss” policy. 5.6. CHWs make home visits.	A: 1. Training records. 2. CHWR reports 3. Training records 4. HC records 5,6. CHW monthly reports 7. CBD monthly reports
V. RESPIRATORY INFEC-TIONS/PNEUMONIA (ALRI): A. Decrease the percentage of children with rapid and difficult breathing within the previous two weeks from 24% to 15%. B. Increase the percentage of mothers of children with rapid and difficult breathing who seek medical treatment from 76% to 85%. C. Increase the percentage of mothers who correctly identify fast and difficult breathing as a sign of pneumonia from 55% to 75%.	A: 1. Midterm and final KPC survey	A: 1. Train 60 volunteer training facilitators 2. Provide refresher training to 60 CHWRs 3. Train 6 ECNs to become TOTs 4. Provide in service training to improve HC “no miss” policy. 5. Train approximately 150 new CHWs to maintain at least 300 active CHWs 6. Provide refresher training for 300 existing CHWs	A: 1. Trained TFs train new CHWs and provide refresher training to previously trained CHWs. 2. CHWRs make supervisory visits with other CHWs and ensure that CHW monthly reports are completed. 3. ECNs as TOTs train new CHWs, provide refresher training to existing CHWs, make supervisory home visits with CHWs, compile monthly statistics from CHW reports. 4. Strategy developed with HC	A: 1. Training records. 2. CHWR reports 3. Training records 4. HC records 5,6. CHW monthly reports 7. BI referral reports

(1) Project Objectives by	(2) Measurement Method	(3) Major Planned Outputs	(4) outputs	(5) Measurement Method
D. Increase the percentage of mothers who correctly identify two or more methods for caring for a child with respiratory infections prior to seeking medical treatment from 15% to 50% E. Provide ALRI specific training to 100% of the active CHWs in the project area.		7. Train 60 CHWs in recognition of pneumonia and administration of first antibiotic dose with immediate referral to health facility.	staff to improve HC "no miss" policy. 5,6. CHWs make home visits. 7. Treatment of children with immediate referral to health facility.	
VI. HIV/AIDS PREVENTION: A. Increase the percentage of women with children under 2 who know 2 or more symptoms of STDs from 19% to 40%. B. Increase the percentage of mothers knowing two or more ways to prevent the transmission of STDs from 36% to 50%. C. Increase the percentage of mothers who know 2 or more ways to prevent HIV/AIDS transmission from 23% to 50%. D. Maintain the percentage of mothers with knowledge that health-looking persons can be HIV positive at 90%. E. Increase condom use by mothers of children under two from 12% to 25%. F. Increase the percentage of mothers who are willing to interact (shaking hands, sharing meals, living in the same house, washing) with a person with HIV/AIDS from 70% to 80%.	A,B,C,D,E,F: 1. Midterm and final KPC survey	A,B,C,D,E,F: 1. Train 60 volunteer training facilitators 2. Provide refresher training to 60 CHWRs 3. Train 6 ECNs to become TOTs 4. Provide in service training to ECNs on STD recognition/ treatment. 5. Train approximately 150 new CHWs to maintain at least 300 active CHWs 6. Provide refresher training for 300 existing CHWs 7. Train 30 CHWs in STD/HIV counseling. 8. Conduct 9 barazas (3 in each location) per year about HIV/AIDS/STDs. 9. Organize and conduct three folk media events/year 10. Train 6 ECNs in HIV/AIDS counseling 11. Establish counseling and testing services at HC. 12. Provide additional training to CO on STD/HIV/AIDS recognition, treatment, and care. 13. Train 6 ECNs on AIDS homecare	A,B,C,D,E,F: 1. Trained TFs train new CHWs and provide refresher training to previously trained CHWs. 2. CHWRs make supervisory visits with other CHWs and ensure that CHW monthly reports are completed. 3. ECNs as TOTs train new CHWs, provide refresher training to existing CHWs, make supervisory home visits with CHWs, compile monthly statistics from CHW reports. 4. Strategy developed with HC staff to improve HC "no miss" policy. 5,6. CHWs make home visits.	A,B,C,D,E,F: 1. Training records. 2. CHWR reports 3. Training records 4. HC records 5,6. CHW monthly reports

(1) Proiect Obiectives bv	(2) Measurement Method	(3) Major Planned Outputs	(4) outputs	(5) Measurement Method
		14. ECNs train CHW counselors on AIDS homecare 15. Develop or purchase educational videos on STD/HIV/AIDS 16. Develop pamphlets about STD signs, prevention and proper treatment. 17. Extend HC to include counseling rooms		
VII. ENVIRONMENTAL HEALTH: A. Increase the percentage of mothers from 87% to 90% who have access to a pit latrine in good condition. B. Increase from 71% to 80% the number of community members with access to proper garbage disposal. C. Maintain at 5% or reduce the percentage of children with burns occurring in a two week period.	A,B,C,D: 1. Midterm and final KPC survey	A,B,C,D: 1. Train 60 volunteer training facilitators 2. Provide refresher training to 60 CHWRs 3. Train 6 ECNs to become TOTs 4. Provide in service training to improve HC “no miss” policy. 5. Train approximately 150 new CHWs to maintain at least 300 active CHWs 6. Provide refresher training for 300 existing CHWs	A,B,C,D: 1. Trained TFs train new CHWs and provide refresher training to previously trained CHWs. 2. CHWRs make supervisory visits with other CHWs and ensure that CHW monthly reports are completed. 3. ECNs as TOTs train new CHWs, provide refresher training to existing CHWs, make supervisory home visits with CHWs, compile monthly statistics from CHW reports. 4. Strategy developed with HC staff to improve HC “no miss” policy. 5,6. CHWs make home visits.	A,B,C,D: 1. Training records. 2. CHWR reports 3. Training records 4. HC records 5,6. CHW monthly reports

(1) Project Objectives by	(2) Measurement Method	(3) Major Planned Outputs	(4) outputs	(5) Measurement Method

(1) Project Objectives by	(2) Measurement Method	(3) Major Planned Outputs	(4) outputs	(5) Measurement Method
HEALTH INFORMATION SYSTEM: 1. Develop tracking system for CHWs to determine CHW activity. 2. Improve tracking of CHW referrals to HC for curative and preventative services and HC referrals to CHWs. 3. Enhance HC statistics to determine disease incidence by age, sex, and location (i.e., project versus non-project areas). 4. Enhance HC statistics to determine use of FP, ANC, and child welfare services by project and non-project areas.	1 a. Mid-term and final evaluation surveys of CHWs and persons obtaining services at the health center.	la. Provide refresher training on completion of reporting forms to existing CHWs. 1 b. Provide new training on completion of reporting forms to new CHWs. Ic. Develop non-monetary incentive to CHWs based on submission of CHW report forms.		

RESPONSES TO THE TECHNICAL REVIEW COMMENTS

Following are responses to the concerns raised in the technical review comments that have not already been addressed in the DIP.

* **At several points in the proposal it is difficult to** distinguish between **the clinic and target populations. This needs to be clarified, and the target population may need to be redefined.**

The HC is located on the boundary of the project area resulting in approximately 60% of the persons seeking services at the HC coming from outside the project area. These individuals have been added to our target population. The target population totals 30,909 (see DIP Table A2), including: 18,785 from the project area plus 12,124 HC attenders from outside the project area.

* **There is vague information provided about the current status of several interventions, including immunizations, AIDS/STD education in the population and breastfeeding. The baseline study should include, at a minimum, information on:**

  ***Immunization levels of children attending the clinic.**
  ***Immunization levels of children in the community.**
  ***KAP on AIDS and STDs**
  ***KAP on breastfeeding**

All children attending HC child welfare clinics receive scheduled vaccinations. However, it is difficult to assess their immunization levels because few bring their growth/immunization cards (Road to Health Cards) for these visits. The HC staff will educate the CHWs and patients to encourage child caretakers to bring this document for all clinic visits. This will help to enforce a "no miss" vaccination policy at the HC. Details on community vaccination levels were collected in the 1994 Baseline Survey and are reported in Attachment B.

The project began community education about HIV/AIDS/STDs in 1994. Community barazas (health education events) were coordinated with community leaders in each of the three project locations. Audience members ranged in **age** from small children to elders. Their comments and questions raised indicated a general acknowledgement of AIDS/HIV/STDs and a need for specific information about transmission, prevention, and positive living for those who are HIV-positive.

During the home visit evaluations of the CHWs who completed training, information on HIV/AIDS/STDs was the most commonly requested. The evaluations also demonstrated that the CHWs were able to answer their questions accurately.

The 1994 Baseline Survey indicated that mothers of children under two were knowledgeable about the risks associated with

HIV/AIDS/STDs. They also noted that they needed more information that can empower them in prevention. Sadly, 65.2% of the mothers stated that they were likely to become infected with HIV/AIDS.

Questions concerning breastfeeding were included in the 1994 KPC survey to assess child nutrition and infant feeding practices during episodes of diarrhea. These results are reporting in Attachment B.

* **Community needs, attitudes and preferences are not addressed in the proposal, except to say that they wanted a health center. This is a large gap. The findings of the needs assessment should be elaborated in the detailed implementation plan.**

The community's needs, attitudes and preferences are expressed primarily through the project's Area Health Committees and CHWs. Primary concerns include income generating activities, AIDS, adequate water supply, access to affordable health care, and the expansion of health care facilities. The project evaluation conducted in July - August 1994 included a survey of CHWs. CHWs interviewed in this survey considered malaria, AIDS and poverty (by 22.6%, 12.9% and 12.9%, respectively) to be the major problems facing their community. In addition, a survey of patients and clients attending the project's HC was also conducted. Of persons interviewed, most would like to see expansion of existing facilities to include maternity and inpatient facilities.

* **The detailed implementation plan should also discuss other current efforts underway to address community health needs. Details should be provided as to the location of other clinics, the gaps in services, and the services that complement those offered by this clinic.**

Additional activities include working with local slaughterhouse owners to control pollution of surface water, working with UNICEF and the Nairobi City Council to locate new public water points, working with AMREF to conduct and treat cases of hydatid disease in the project area. The project has also helped community members to form an active chapter of the Kenya Diabetic Association through the HC. The project will continue to work with the community, other organizations and agencies to identify health needs and develop strategies to address those needs. The other issues raised are addressed in the DIP.

* **There is no mention of other local NGOs working in the area. The detailed implementation plan should outline means of collaboration with any local groups that may exist.**

There are no other NGOs working within the project area. The project does collaborate with Kikuyu Hospital, which is located approximately five kilometers away, on coordination of HIV/AIDS

services and other CBHC activities. In addition, the project works with local schools, churches and small community groups.

* **Given the project's acknowledged difficulties in meeting its objectives for the second funding period, due in part to the unexpected loss of the project director, it may be especially important to draw on high-quality technical assistance for this phase of the project.**

The project concurs with the review team that high-quality technical assistance for this phase of the project is necessary. The project is including the costs of hiring an HIS consultant in the attached budget and will also be seeking outside support in the development of IGAs.

* **Regarding HIV/AIDS prevention, there is little mention of the psychosocial dimensions of the community, with** only **limited description** of **the major behavioral determinants of HIV transmission. MIHV needs to determine the major risk behaviors in this area, and draw connections between the chosen intervention and the likelihood of success, based on this information.**

From the 1994 Baseline Survey, the project has learned that mothers felt it was likely they would become infected and that they had no control in the relationship with their husbands nor trust in their husbands' fidelity. Most women expressed their willingness to use condoms; however, they felt ill-prepared to negotiate condom use with their partners. Often, men physically abuse their partners in response to suggestions of condom use. Much of the community is economically disadvantaged and alcohol abuse is high. The association of commercial sex workers with drinking establishments in the community highlights a major route of transmission.

Because of these difficult circumstances, the project will focus on education of sexually active men. Unless the men of the community accept behavioral change, education of the women will not significantly affect the incidence of STD/HIV/AIDS. Issues regarding AIDS orphans will be addressed also, using the cultural importance placed on children's roles in continuing family heritage.

Although the community acknowledges the existence of HIV/AIDS, the project has experienced extreme cases of individual denial and family abandonment when **a** person has been diagnosed. The need for confidential counselling and privately-acquired information on STDs/HIV/AIDS is great. Diagnosed individual have been thrown out of their homes, abandoned by family and friends, lost employment, and denied services by local shop-owners and the religious community.

In addition to project plans to establish a counselling center with referrals for health center testing and treatment, education

of the community through exposure to PWA (person with AIDS) educators and education of religious leaders of the community is greatly needed. CHW follow-ups for HIV-positive community members can educate family and neighbors about acceptance of these individuals.

The project will integrate the HC's family planning services **and** STD diagnosis and treatment with HIV/AIDS control. Family planning nurses are being trained in HIV/AIDS counselling and recognition of signs and symptoms of STDs. CHWs, CBDs and TBAs are also being trained in recognition of STDs which they will refer to the HC for diagnosis and treatment.

* **Elements of the proposed prevention, education and condom promotion campaign need to be elaborated. Key questions should be further addressed in more detail:**

  ***Who is educating whom and about what?**
  ***What materials and messages will be developed, how, and why?**
  ***What are the projected numbers of condoms sufficient?**
  ***Where will the condoms come from, how much will they cost, how will they be promoted, and with whom?**

Most of the population is not knowledgeable on proper condom use or disposal. Community education and the wide distribution of instructions is a project objective. The project is working to develop instructions that are pictorial for the illiterate population and in Kiswahili, Kikuyu and English. These instructions will be supplied with each distribution of condoms. CHWs, TBAs and CBDs distribute condoms in the community and advise villagers on their proper use. Prevention of STDs, HIV/AIDS as well as family planning purposes are taught. This targets mostly the women of the area, since most CHWs are women.

Community educators, including the project staff, trained CBDs and CHWs, will work with youth groups, sexually active men, local bar owners and patrons, and community and church groups. In sensitivity to community moral standards, condom promotional information will be accompanied with information from the Kenya National AIDS Control Program and local churches that highlights fidelity and abstinence for unmarried persons.

HC staff including the Clinical Officers, Family Planning Nurses and counsellors will advise on condom use and distribute condoms to interested clients. Condom dispensers are also situated in the public toilets for HC clients and are requested by individuals who visit the HC's Community Health Office. Condoms are provided free to the community and are obtained by the project through the MOH. Distribution of condoms in the community through the use of condom dispensers is another promotion objective, with supply being replenished on a regular basis by CHWs and HC staff. Target sites include public toilets, bars, and shops. Condom dispensers are provided by FPPS.

In addition, the project is in discussions with UNICEF to arrange for CHW, TBA and CBD distribution of 'Trust' condoms as an incentive IGA. These are being marketed by Population Services International. Lessons learned from other NGOs show that condoms which demand payment are valued over those that are distributed free and therefore may be more effective behavioral modifiers. Condoms that are distributed by the MOH are barred from sale in accordance with donor regulations.

Currently the project distributes 6,200 condoms per month. With increased efforts in condom promotion and STD/AIDS intervention programs, the project expects to distribute at least 10,000 per month. Supplies from the MOH have been sufficient to date.

* **The project should consider defining more narrowly from among project beneficiaries the population most heavily targeted for the HIV/AIDS intervention. Women and their partners and youth make up a majority of the population, and not all are at equal risk.** Furthermore, **each requires different tailored approaches in messages and education.**

The project will focus more heavily on community education targeting youth through school seminars, peer education, and participation in folk media education. In addition, target groups are being organized in areas of the project where unemployment, idleness, and alcohol are having a more dramatic impact on youth and men. Project participation in educational programs, using puppetry, drama, and folk media to facilitate involvement of the communities in intervention programs, is a key effort of the CBHC program. Subsequent videos of local community performances as well as other videos produced by the MOH, UN programs and other NGOs are shown in the HC patient waiting area.

The establishment of a well-advertised counselling service for STD/HIV/AIDS will aid those persons in the community who perceive themselves at high risk. As part of this service, counsellors will be trained in advising clients on prevention methods, sensitizing them to condom use, educating men on the need for condom use, and working with women on condom negotiation with their partners.

Through outreach services to the local bars, high risk groups of men will be given access to education and materials for prevention. If possible, the project plans to work with bar owners in providing 'question-answer' sessions and distribution of IEC materials.

ATTACHMENT F

MIHV Kenya Project Staff and Organization as of 1 April 1995

Project Director	Michael Smyser, MPH
Deputy Director (Proj Off)	Lois Miano, KRN
Vol Medical Director	Eric Jamison, MD, MPH
Assistant Project Officer Community Coordinator	Leonida Ongarl Atieno
Assistant Project Officer	Lolse Wanjfku Mukanda, ECN
Vol Hlth Educator	Stella Chao
Vol Administrative Liason	Vacant
Administrative Assist	Irene Kamau

Chandari a-MIHV Health Centre:

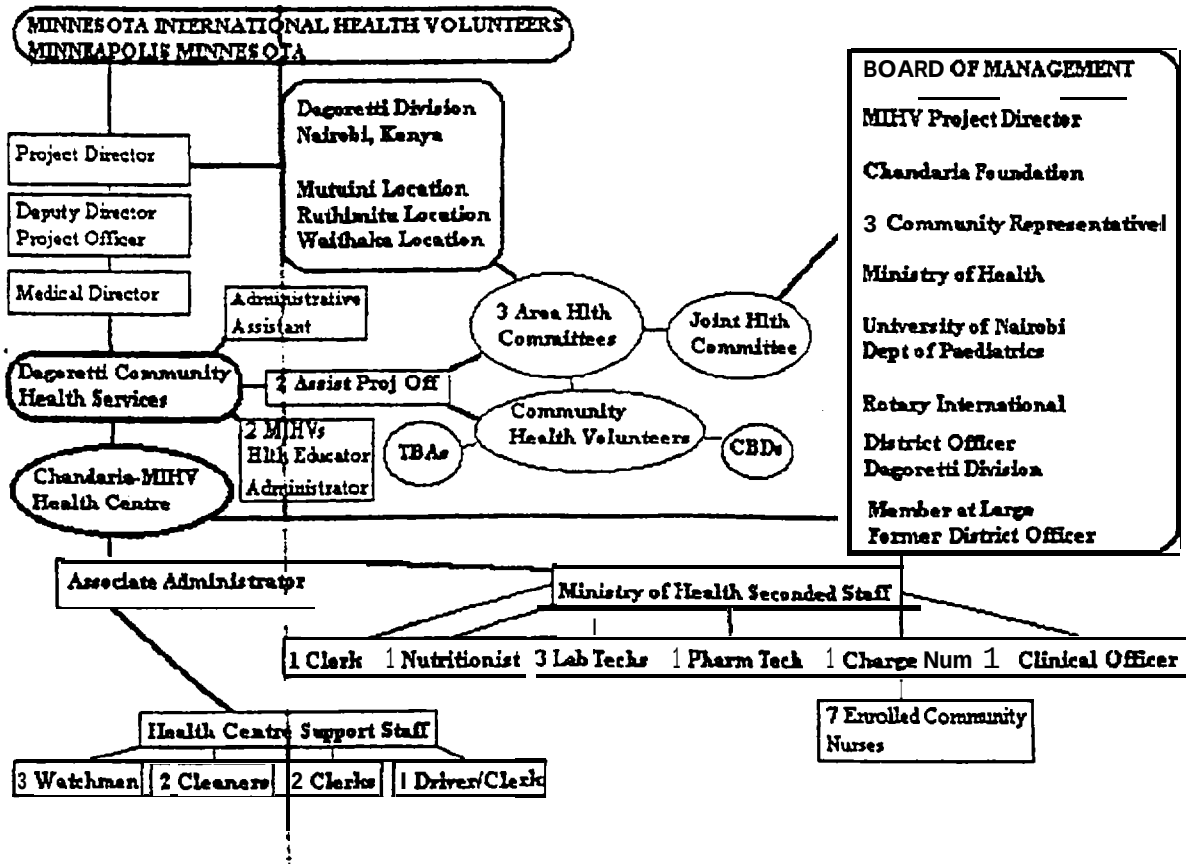
Associate Administrator	Vacant

Ministry of Health Seconded Staff:

Clerk	Esther Kathini
Nutritionist	Dorcas Kerubo
3 Lab Techs	Jackson Njagi, Jane Kambo, Jacinta Ngugi
Pharmacy Tech	Charles Wawerú
Charge Nurse	Elizabeth Wambugu, KRN
7 Enrolled Community Nurses	Esther Machanga, Pamela Ochieng, Teresia Waitimu, Evalyne Omkuba, Grace Kamau, Dorcas Kamau, Susan Ndei
Clinical Officer	Catherine Riungu

Health Centre Support Staff:

3 Watchmen	Michael Mwansi, Amon Thandi Gitau, Peter Kariuki
2 Cleaners	Theresia Gitoto, Jane Chege
2 Clerks	George Muchene, David Gikuyu
Driver/clerk	Leonard Gichuru Gitau



DIP TABLE C: TRAINING AND SUPERVISION SUMMARY

PVO/Country: MrHV/KENYA Project Duration: Start Dare: September 1, 1994 Estimated Completion Date: August 31, 1997

TRAINEE C O JOB TITLE S E	T I T L E	NO. OF HOURS PER MONTH		SUPERVISOR	CONTACTS PER MONTH	I N T E R V E N T I O N (S)
		INITIAL	INSERVICE			
Asst. Project Officer	Community Health Worker	28	8	Deputy Director	28	CBHC
Asst. Project Officer	Traditional Birth Attendants	28	8	Asst. Project Director	28	CBHC
AMREF	TOF Training	160	0	John Atieno	0	Train TOTs
Asst. Project Officer	HIV/AIDS Counselling	80	8	Deputy Director	28	HIV/AIDS counselling (CBHC)
Community Nurse	HIV/AIDS Counselling	80	8	Asst. Project Director	28	HIV/AIDS counselling (HC)
Asst. Project Officer	CHW Refresher	24	8	Deputy Director	28	CBHC
Asst. Project Officer	TBA Refresher	24	8	Asst. Project Director	28	CBHC
TOTAL		424	48		168	

LOTUS 94DPTBC.WK1

ATTACHMENT G

DIP TABLE D: HEADQUARTE SCHEDULE OF ACTIVITIES

(Check box to specify Quarter and Year)

PVO: MIHV

	Year 1				Year 2				Year 3			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Personnel in Position												
a. HQ/HO Technical	X	X	X	X	X	X	X	X	x	x	x	x
b. HQ/HO Administrative	X	X	X	X	X	X	X	X	x	x	x	x
c. Country 1 Key Staff	X	X	X	X	X	X	X	X	X	X	X	X
d. Country 2 Key Staff												
2. Baseline Reports Completed												
a. Country 1	X											
b. Country 2												
3. Training Completed												
a. Country 1												
b. Country 2												
4. Procurement of Supplies	X	X	X	X	X	X	X	X	X	X	X	X
5. Services Delivery Initiated												
a. Countrv 1	X	X	X	X	X	X	X	X	X	X	X	X
b. Country 2												

ATTACHMENT H

DIP TABLE D: HEADQUARTERS SCHEDULE OF ACTIVITIES

PVO: MIHV

	Year 1				Year 2				Year 3			
	1	2	3	4	1	2	3	4	1	2	3	4
6. HQ/HO Technical Staff Visits												
a. Country 1			X				X					X
b. Country 2												
7. Health Info. System Functioning												
a. Country 1	X	X	X	X	X	X	X	X	X	X	X	X
b. Country 2												
8. Mid-Term/Final Evaluation							X	X				
9. A.I.D. Reports Prepared												
a. Country 1		X								X		
b. Country 2												

DIP TABLE D: FIELD PROJ Γ SCHEDULE OF ACTIVITIES

PVO: MIHV

Country: KENYA

	Year 1				Year 2				Year 3			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Personnel in Position												
a. Project Manager	X	X	X	X	X	X	X	X	X	X	X	X
b. Technical Coordinator												
c. Health Information System Manager												
d. Community/Village health worker	X	X	X	X	X	X	X	X	X	X	X	X
e. Other Support												
2. Health Information System												
a. Baseline Survey												
– Design/preparation												
– Data collection and analysis	X											
– Dissemination and feedback to community and project management	X											
b. Consultants/contract to design HIS			X									
c. Develop and test HIS	X	X	X	X			X					
– Implementation	X	X	X	X	X	X	X	X	X	X	X	X
– Development and feed back to community and project management				X				X				X

WORDPERPERFECT 94DPTBD.WP

DIP TABLE D: FIELD PROJECT SCHEDULE OF ACTIVITIES

PVO: MlHV

Country: KENYA

	Year 1				Year 2				Year 3			
	1	2	3	4	1	2	3	4	1	2	3	4
3. Training												
a. Design		X				X				X		
b. Training of trainers			x	x	X	X	x	x	X	X		
c. Training sessions		X	x	x	X	X	x	x	X	X	X	X
d. Evaluation of knowledge of skills	X	X	x	x	X	X	x	x	X	X	X	X
4. Procurement of Supplies	X	X	X	X	X	X	X	X	X	X	X	X
5. Service Delivery to be initiated												
a. Area 1												
- Control of Diarrheal Diseases												
- Immunization												
- Nutrition:												
Breastfeeding												
Growth Monitoring/Promotion												
- Micronutrients												
- HIV	X	X	X	X	X	X	X	X	X	X	X	X
- Control of Pneumonia	X	X	X	X	X	X	X	X	X	X	X	X
- Maternal Care/Family Planning												
- Other												

DIP TABLE D: FIELD PROJECT SCHEDULE OF ACTIVITIES

PVO: MIHV

Country: KENYA

	Year				Year 2				Year 3			
	1	2	3	4	1	2	3	4	1	2	3	4
b. Area 2												
– Control of Diarrheal Diseases	X	X	X	X	X	X	X	X	X	X	X	X
– Immunization	X	X	X	X	X	X	X	X	X	X	X	X
– Nutrition:	X	X	X	X	X	X	X	X	X	X	X	X
Breastfeeding	X	X	X	X	X	X	X	X	X	X	X	--
Growth Monitoring/Promotion	X	X	X	X	X	X	X	X	X	X	X	X
–Micronutrients	X	X	X	X	X	X	X	X	X	X	X	X
– HIV	X	X	X	X	X	X	X	X	X	X	X	X
– Control of Pneumonia	X	X	X	X	X	X	X	X	X	X	X	X
– Maternal Care/Family Planning	X	X	X	X	X	X	X	X	X	X	X	X
– Other (Environmental Health)	X	X	X	X	X	X	X	X	X	X	X	X
6. Technical Assistance												
a. HQ/HO/Regional office visits			X				X			X		X
b. Local Consultants							X					
c. External technical assistance		X				X	X			X		
7. Progress Reports												
a. Annual project reviews				X				X				X
b. Annual report		X								X		
c. Mid-term evaluation							X	X				
d. Final evaluation											X	X